

# Research Highlights

From the Community Health Research Initiative  
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## **Intensive Street Outreach with Injection Drug Users**

Street outreach has been a linchpin of HIV prevention programs in Virginia since the 1980s. The ability of street outreach specialists to reach and interact with high-risk populations who are unlikely to access the care system and unaware of their HIV status attracts many HIV prevention agencies to this mode of prevention education, awareness, and testing. However, as street outreach has evolved, the effectiveness of various modalities of street outreach has been questioned. In 2002 and 2003, the Virginia HIV Community Planning Committee in partnership with the VCU Survey and Evaluation Research Laboratory/Community Health Research Initiative conducted an extensive outcome study on intensive street outreach. The Street Outcome Study (SOS) was designed to assess the effectiveness of training outreach specialists to deliver a theory-based behavioral intervention to injection drug users and to evaluate the outcomes of delivering the intervention on the street.

### ***Virginia Street Outreach - History***

Historically, street outreach has been used as a strategy to reach underserved and hidden populations such as the homeless, people with serious mental health issues, substance abusers and others at high-risk for HIV infection. In the early 1980s, street outreach was used for information dissemination and the distribution of literature and HIV risk reduction materials (condoms and bleach kits).

In the 1990s, the Centers for Disease Control and Prevention (CDC) supported efforts to evaluate the effectiveness of street outreach as an intervention to prevent HIV transmission in high-risk populations. One such study was the AIDS Evaluation of Street Outreach Projects. This five year evaluation study examined changes in HIV-related risk behaviors, measured exposure to street outreach specialists, and assessed the association between the interaction with street outreach specialists and condom use. Overall, evaluation results demonstrated that

outreach specialists were initially reluctant to incorporate a more theoretical foundation into their interventions. However, once trained, the specialists were able to incorporate the new knowledge into their existing practice.

With social and behavioral interventions frequently cited among the most important primary prevention activities to stop the spread of HIV, Virginia examined how behavioral interventions could be incorporated into street outreach activities. In 1989, the Urban League of Hampton Roads, Inc. piloted the first evaluation study integrating the Transtheoretical Model for Behavior Change into street outreach with African Americans. Client level data was collected over three month intervals. Although the data were not sufficient to demonstrate a measurable correlation between the intervention and client behavior change, the experience convinced the CPG of the necessity for setting minimum standards for street outreach.

In 1998, the CPG's Model Programs Subcommittee (now the Standards and Practices subcommittee), developed standards for street outreach and created a street outreach taxonomy. The subcommittee also recommended a standardized training which was developed and implemented by the Virginia Department of Health and Virginia Commonwealth University.

In 2003, the CPG and SERL/CHRI partnered to design and implement an outcome study to explore the effectiveness of intensive street outreach; results would be used to inform program monitoring and resource allocation decisions. The study included five phases of implementation beginning with training street outreach specialists, making initial contact and prescreening of potential participants, enrollment and informed consent, implementation of the intervention, and evaluation (both active and passive).

This research highlight provides an overview of the 2003 Street Outcome Study with a focus on participants' changes in reported risk behaviors.

### ***Study Design***

Selected staff members from VDH funded agencies were trained as Street Outcome Specialists (SOS) and received extensive didactic and experiential training to implement Intensive Street Outreach based on precepts of the Transtheoretical Model of Behavior Change, Brief Motivational Interviewing, and adult learning theory. In addition, they received training on privacy issues and human subjects' rights and protections.

Seven SOS participated in the study to conduct the intervention. The SOS were fully informed about the purpose and operations of the study and consented to participate. Each of the SOS screened their client contacts for eligibility, recruited those who were eligible, conducted intake and baseline assessments, and offered study participation. Eligible participants were African American males over the age of 18 who reported active use of injection drugs and had not been in substance abuse services for the previous 30 days.

A mix of qualitative and quantitative measures were collected over nine months including baseline, 3-month, 6-month and 9-month risk

behavior follow-up information. Encounter logs from the SOS were also collected and analyzed for content and themes.

### ***Sample Characteristics***

Two groups of individuals were enrolled as participants in the study – street outreach specialists from four participating agencies and the clients referred to the study team by these individuals. Of the seven SOS, three were women and four male; all were African American. They ranged in age from 36-56 years, with an average age of 44. Nearly half (43%) had not graduated from high school, 28% had graduated, and 28% had gone on to attend college (but had not graduated). Each agency agreed to recruit 20 clients, to be referred and followed by a team of two SOS. The number of clients per agency ranged from 18-25, and the percentage of all clients who were referred by specific agencies ranged from 21% to 29%. The number of clients referred to the study by individual SOS ranged from 7-19.

Of the 87 persons enrolled into the study, all were African American (two also identified Latino or Hispanic origin), 86 identified as male (one as transgender), 83 had not received treatment in the past 30 days (one had received treatment and three did not answer), and 93% had been tested for HIV. Only one of the participants reported a positive result, 11 did not know their results and 86% reported negative results.

Study participants were fairly evenly split on relationship status – 47% were in a committed relationship and 53% were not. All but 4 participants identified themselves as heterosexual; one gay, two as bisexual and one provided no response. Although two participants had graduated from college or post graduate school and 18 others had attended college without graduating, three-fourths had ended their formal education with high school graduation or GED (37%) or had not finished high school (40%). A majority (57%) were 45 or older (49% were 45-54, 8% were 55 or older); 43% were younger (16% between 23-35 and 26% between 34-44).

### ***Delivering and Evaluating the Intervention***

The SOS began speaking with their clients about the study and assessing their eligibility



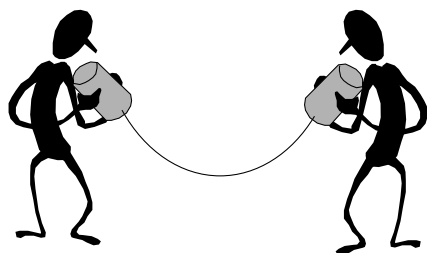
through the use of existing street outreach encounter logs. A total of 87 clients were enrolled; baseline risk assessments were completed on all 87. Based on his risk assessment data, each client was staged on five risk behaviors to determine where he was in terms of changing high-risk behavior and adopting healthier behaviors. A summary report of each client's information was returned to the SOS.

When the SOS encountered a study participant, he/she would use the appropriate brief motivational interviewing techniques (open-ended questions, affirmations, and reflective listening) to identify where the client was in his behavior change and would then use the appropriate processes to address the targeted risk behavior. Each encounter was documented on an IRB-approved encounter form and sent to SERL/CHRI. Every three months the SOS would work with the field evaluator to arrange a date, time and location for other risk assessment data collection points.

The SOS met with their clients through the end of June, 2003 unless the client was incarcerated, died, was in the hospital or moved. Various environmental factors such as weather, drug raids, shootings, unstable housing issues, entry into SA treatment, and hospitalizations added to the difficulty in tracking clients.

### ***Results – Nature of Encounters***

One in five of enrolled clients (22%) had no reported encounters. Among the 68 clients for whom encounters were reported by SOS, the number of encounters per client ranged from 1-24. Three contacts per month per client was set as a target but was not achieved for the majority of clients. For 33% of 60 clients on whom data were sufficient the average number of encounters per month was less than 1.5. Encounters lasted from 3-46 minutes with an overall average length of 16 minutes.



Analysis of data that described the techniques and content of conversation between SOS and their clients indicated that SOS focused their open-ended questions on topics directly related

to the study purpose and to the specific needs of clients. Half were focused on injection drug use and one in 12 on the importance of seeking environments conducive to behavior change. Everyday issues such as housing, employment and legal requests were also documented.

### ***Results – Changes in Report Risk Behaviors***

At baseline, 50 of the 68 enrollees for whom encounters were reported (73%) selected a specific behavior to target for change – 56% targeted reduction of drug use, 6% needle sharing, 4% sex with multiple partners, and 4% increased condom use. One person targeted increase in cleaning works, two selected multiple targets, and 14 stated that they had not selected a target behavior to change (four reported no answer).

Between baseline and three month follow-up, the study population was reduced to 44 clients from indictments, incarceration, death, or moving to another geographic area. The client population was further reduced at six months to 24 clients. Of the clients remaining through the study process, the majority (85%) had targeted reducing drug use.

Nearly two-thirds (63%) of retained clients reported having reduced their injection drug use; 7% were not using and 56% were injecting less often. One in five (21%) were injecting at baseline frequency and 16% reported injecting more often.

Of the 31 clients who were still using and at least sometimes sharing works, 8 (26%) shared works less often, 15 (48%) shared works with about the same frequency, and 8 (26%) shared works more often. Of 31 clients who were still using and at least sometimes shared works, 18 (58%) reported always cleaning their works, 9 (29%) were cleaning works more often, one reported no change, and three reported cleaning works less often.

A majority of study participants reported low risk for sexual transmission of HIV at first risk assessment by either being sexually inactive (18%) or having a main partner only (43%). Thirty-nine percent were at higher risk due to having multiple sex partners, with or without a main partner. This pattern of risk changed over the study period. Of the 44 clients who received a second assessment, the percentage of individuals at higher risk had dropped from 39% to 27%, and at third assessment, the percentage of 24 clients at higher risk was 33%.

Through statistical analysis, it was found in most cases that there was a positive relationship between the delivery of the intervention according to the guidelines and the adoption of harm reduction behaviors, though many of the relationships were weak.

The study has limitations including using a non-random sample, low number of cases, and lack of control or comparison group. More rigorous designs would be needed to confirm the results, but the outcome of this analysis is promising.

### **Summary and Recommendations**

Throughout the study, a significant body of additional information gathered from meetings and personal discussions about the contextual and inter-personal dynamics of the study was also reviewed and provided insight into street outreach.

SOS emphasized the importance of developing the helping relationship. SOS stated that during their experiences, the training on brief motivational interviewing assisted them in learning how not to tell people what to do, how to listen more, and to be more patient with their clients. Published literature supports the need to develop relationships that are non-judgmental. In addition, SOS commented they needed to have a sense of mutuality and trust within their organization as well as with their street outreach partner.

Based on the study findings, several recommendations were put forth for consideration by VDH and the CPG.

- Charge the Standards and Practices Subcommittee of the CPG to consider revising current guidelines and standards of practice for intensive street outreach, to be thought of as a strategy within multi-component programs as well as stand alone intervention.
- Explore the feasibility of linking data with other publicly funded systems and agencies providing services to injection drug users, to facilitate the ability of street outreach specialists to work effectively with populations of special concern to HIV prevention and care and to monitor implementation and outcomes.
- Continue to increase the rigor of street outreach training to incorporate ongoing coaching and skills-building, including “in-class” and “at-work” demonstrations of evidence-based best practices and routine reporting of client encounters.
- Involve executives and senior managers of agencies funded by VDH for HIV prevention in a statewide effort to discuss modified organizational procedures through which street outreach specialists will be appropriately deployed, supervised, evaluated, and rewarded for their efforts.

### **The SERL/CHRI and the VHCPC**

*The Virginia Commonwealth University Survey and Evaluation Research Laboratory (founded in 1982) and Community Health Research Initiative (founded in 1994) serve the University, the community, and government through some 100 projects annually. CHRI projects are focused on public health research to address vulnerable populations and health disparities.*

*CHRI staff conducted the Street Outcome Study for the Virginia HIV Community Planning Committee, an advisory committee to the Virginia Department of Health. The VHCPC includes representatives from communities across Virginia most affected by the epidemic and is responsible for developing an annual HIV prevention plan for Virginia for submission to the Centers for Disease Control and Prevention.*

*For more information about this study, the CHRI, or the VHCPC, contact: VCU Community Health Research Initiative, attention Laurretta Safford, P.O. Box 3016, Virginia Commonwealth University, Richmond, VA 23284-3016, phone (804) 828-8813, fax (804) 828-6133.*